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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,512	11/28/2000	Katsuki Minamino	450100-02864	4886
20999	7590	03/23/2006	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			RIVERO, MINERVA	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Response to Amendment

1 In the Remarks filed 12/30/05, Applicants cancelled claim 4 and submitted arguments for allowability of the pending claims.

Response to Arguments

2 Applicant's arguments filed 12/30/05 have been fully considered but they are not persuasive

3 In response to applicant's argument that the references fail to show certain features of applicant's invention (see Page 7 of Remarks, regarding Claim 1), it is noted that the references relied upon by applicant (i.e., the coefficients for recognizable features) are not recited in the rejected claim(s). Although the specification, limitations from the specification of *Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057, and *et al.* effectively supplement the teachings of applicant's invention, *through multiplication with coefficients*; Fig. 3A, *increasing the level of response as time* *and level value is stored*, Col 11,

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Lines 8-32; *recognition data is created in accordance with the content level*, Col. 11, Lines 47-59).

Moreover, Applicant argues that Edatsune does not disclose weighting words in accordance with a growth state of the robot but in accordance with the time of day. [This limitation is in fact disclosed by Imagawa *et al.*, see Fig. 2B, *see words weighted through multiplication with coefficients*; Fig. 3A, *see Response Content Level Generation Unit, increasing the level of response as time passes and relationship between passage of time and level value is stored*, Col. 11, Lines 8-32; *recognition data is created in accordance with the content level*, Col. 11, Lines 47-59)]. The examiner cannot concur with the Applicants. In both instances, the passage of time is the determining factor as to the type of response (*weighting of the words*). Therefore claim 1 stays rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1, 3, 5-8 and 10-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Edatsune (US Patent 5,802,488) in view of Imagawa *et al.* (US Patent 6,353,764).

6. Regarding claims 1, 10 and 11, Edatsune discloses an interactive speech recognition device, method and computer program disposed in a robot comprising:

speech recognition means for recognizing speech including a dictionary in which words to be recognized in speech recognition are described (Col. 10, Lines 35-42; Col. 4; Lines 25-28; Fig. 1A; Col. 4, Lines 25-28; Fig. 2B, see element 5);

control means for controlling said speech recognition means in accordance with a growth state of said robot, wherein said growth state is comprised of a plurality of nodes corresponding to increasing maturity levels for said robot (drive control unit; Fig. 1B, element 7; Col. 12, Lines 23-56);

action decision means for determining and performing a predetermined action in accordance with the speech recognized by said speech recognition means and an occurrence probability of the predetermined action as determined by the growth state (Col. 4, Lines 62-Col. 5, Lines 5; Col. 5, Line 60 – Col. 6, Line 3 with Col. 11., Lines 8-32 and Col. 12, Lines 25-56).

However Edatsune does not disclose but Imagawa *et al.* do disclose said control means controls said speech recognition means such that the words described in said dictionary are weighted in accordance with the growth state of said robot and speech recognition is performed using the weighted words (Fig. 2B, see *words weighted*

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through multiplication with coefficients; Fig. 3A, see Response Content Level Generation Unit; increasing the level of response as time passes and relationship between passage of time and level value is stored, Col. 11, Lines 8-32; recognition data is created in accordance with the content level, Col. 11, Lines 47-59).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Edatsune by having said control means controls said speech recognition means such that the words described in said dictionary are weighted in accordance with the growth state of said robot and speech recognition is performed using the weighted words, as taught by Imagawa *et al.*, in order to effect a relationship between a response of the robot and the passage of time.

7. Regarding claim 3, Edatsune discloses an interactive speech recognition device, method and computer program wherein said control means changes the recognition accuracy of said speech recognition means in accordance with the growth state of said robot (Col. 16, Lines 35-42).

8. Regarding claim 5, Edatsune discloses said speech recognition means includes dictionary storage means for storing a plurality of dictionaries (Fig. 2A, element 21, Fig. 3A, element 32) in which words to be recognized in speech recognition are described such that the words to be recognized are divided into groups (weighting coefficients, response content level) and the respective groups of words are stored in different

dictionaries (Fig. 2A, element 21, Fig. 3A, element 32 and Col. 8, Lines 22-29 and Col. 11, Lines 17-20).

9. Regarding claim 6, Edatsune discloses an interactive speech recognition device, method and computer program wherein:

speech recognition means includes a dictionary in which words to be recognized in speech recognition are described (responses, Col. 11, Lines 8-32) such that other words are linked to said words to be recognized ("Good Morning" to G-o-o-d mor-ning; Col. 12, Lines 23-32); and

said control means controls said speech recognition means such that another word linked to a word (Col. 12, Lines 23-32), which is included in the dictionary and which is obtained as a speech recognition result, is output as a final speech recognition word depending upon the growth state of the robot (Col. 12, Lines 23-32).

10. Regarding claim 7, Edatsune discloses an interactive speech recognition device, method and computer program wherein words to be recognized in speech recognition are described in said dictionary such that said words are linked to other acoustically (Good Morning to G-o-o-d mor-ning; Col. 12, Lines 23-32) or semantically similar words.

11. Regarding claim 8, Edatsune suggests that control means controls the maximum number of words to be described in said dictionary, in accordance with the growth state of said robot (Col. 12, Lines 23-32).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

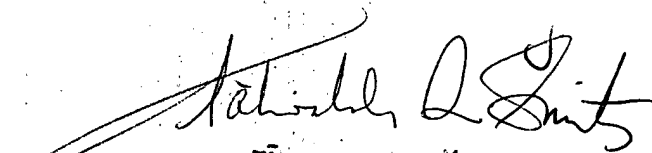
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minerva Rivero whose telephone number is (571) 272-7626. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MR 3/9/06



TĀLIVALDIS IVARS ŠMITS
PRIMARY EXAMINER